

CAPE OF GOOD HOPE.

DEPARTMENT OF AGRICULTURE.

R E P O R T S

OF THE

INSPECTOR OF MINES, KIMBERLEY,

(INCLUDING THE REPORT OF THE MINES INSPECTOR
OF EXPLOSIVES)

AND THE

INSPECTOR OF CLAIMS, BARKLY WEST,

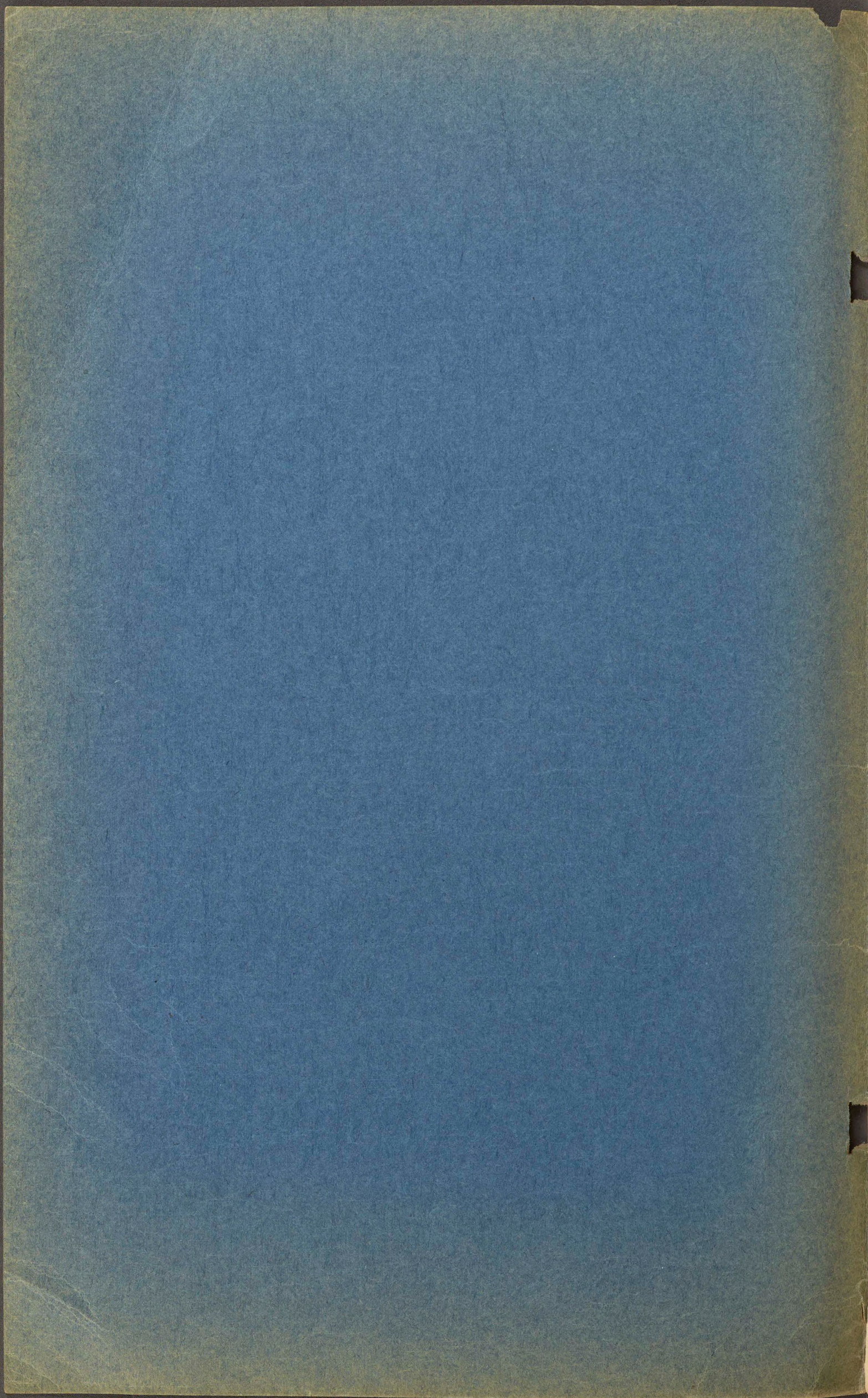
FOR THE YEAR 1903.

Presented to both Houses of Parliament by Command of His Excellency the Governor
1904.

CAPE TOWN:
THE CAPE TIMES LIMITED, GOVERNMENT PRINTERS,
1904.

[G. 75—1904.]

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CAPE OF GOOD HOPE.

Reports of the Inspector of Mines, Kimberley (including the Report of the Mines Inspector of Explosives), and the Inspector of Claims. Barkly West, for the Year 1903.

Presented to both Houses of Parliament by Command of His Excellency the Governor.

1904.

I.—REPORT OF THE INSPECTOR OF MINES, KIMBERLEY, FOR THE YEAR 1903.

DIAMOND MINES.

The Mines were in a much better position, both as regards native labour and the supply of coal and other mining materials, than in the previous year.

Kimberley Mine.

Rock Shaft.—This shaft was sunk 394 feet during the year, and has now reached a depth of 2,627 feet. The next level will be driven at 2,520 feet.

A prospect shaft has been sunk from the 2,160 to the 2,520, and at the latter level about 450 feet of tunnels were driven, the shaft being about 100 feet from the diamondiferous pipe.

The top working level, at the end of the year, was the 1,800.

Winding from the 2,160 foot level was commenced on the 20th April.

A rope haulage has been substituted for the chain haulage, and twenty cubic foot side-tipping trucks for the sixteen foot end-tipping trucks. Automatic truck tippers are in use at the shaft, and the Acting General Manager stated in his last annual report that, "by the introduction of these tippers we have been able to do away with about 50 natives per day."

Depth.—The greatest depth reached in diamondiferous ground was 2,520 feet, and the enclosing rock is quartz-porphyry.

Water.—The average quantity of water pumped during the year was 8,952 gallons per hour, as against 9,940 gallons for the previous year.

Open Mine.—The area of the open mine is about 38 acres, and the depth 912 feet below surface, or 615 feet below the top of the melaphyre.

Cattle.—The average number of horses and mules daily employed was 162.

Output.—The output of blue ground was 1,138,367 loads, of 16 cubic feet. There were also hauled 55,191 loads of "reef," or waste ground.

Wages.—Wages to white men ranged from £3 12s. to £6 per week, and to Kafirs £1 1s. per week, in compounds.

Labour.—The average number of persons daily employed is returned as follows:—Underground: 138 white and 1,109 coloured; above ground: 304 white and 1,334 coloured; total, 2,885.

Accidents.—There were 42 accidents reported during 1903, from which 42 persons suffered. Of these 5 were killed on the spot, or fatally injured.

The following table gives particulars of these accidents:—

ACCIDENTS IN KIMBERLEY MINE IN 1903.

Place or Cause of Accident.	No. of Separate Accidents.	No. of Persons Killed.		No. of Persons Injured.	
		White.	Coloured.	White.	Coloured.
UNDERGROUND.					
Falls of ground	18	...	2	2	14
Ground falling down shafts ...	2	...	...	2	...
Timber falling down shaft ...	1	...	1	...	...
Fall from ladder	1	...	...	...	1
Falling down "pass"	1	...	1	...	...
On tramways or by trucks ...	4	...	...	1	3
Explosives	1	...	...	...	1
Miscellaneous	1	...	...	...	1
	29	...	4	5	20
ON SURFACE.					
On tramways or by trucks ...	11	...	...	...	11
Miscellaneous	2	...	1	1	...
	13	...	1	1	11
Total	42	...	5	6	31

De Beers Mine.

Rock Shaft.—This shaft has reached a depth of 2,076 feet. The next level will be driven at 2,040 feet. A prospect shaft has been sunk, on the east side of the mine, from the 1,720 to the 1,840, and about 300 feet of tunnels driven. The top working level, at the end of the year, was the 1,240.

Depth.—The greatest depth reached, in diamondiferous ground, is 1,840 feet, where the enclosing rock is quartz-porphry.

Water.—The average quantity of water pumped (gallons per hour) was 2,900 from the rock shaft, and 697 from Victoria shaft, as against 3,328 and 1,235 for the previous year.

Area of Open Mine.—The area of the open mine is about 35.5 acres.

Cattle.—The average daily number of horses and mules employed was 336.

Output.—The output of blue ground was 1,375,661 loads, of 16 cubic feet. There were also hauled 82,434 loads of "reef," or waste ground.

Wages.—The same as at Kimberley Mine.

Labour.—The average number of persons daily employed is returned as follows:—

Underground: 196 white and 1,513 coloured; above ground: 549 white and 1,948 coloured (including 654 convicts); total, 4,206.

Workshops.—The average number daily employed at the workshops, at work for the various Mines, is returned as 535 white and 223 coloured; total, 758.

Accidents.—There were 58 accidents reported during the year, from which 61 persons suffered; of these 15 were killed on the spot, or fatally injured.

The following table gives particulars of these accidents:—

ACCIDENTS AT DE BEERS MINE IN 1903.

Place or Cause of Accident.	No. of Separate Accidents.	No. of Persons Killed.		No. of Persons Injured.	
		White.	Coloured.	White.	Coloured.
UNDERGROUND.					
Mud-rushes ...	3	...	4	...	...
Falls of ground ...	10	...	7	1	3
Whilst ascending or descending shafts by machinery ...	1	...	...	...	1
Falling down shaft ...	1	1	...	...	...
Timber falling down shaft ...	1	...	...	...	1
Falls from ladders ...	2	...	...	...	2
On tramways or by trucks ...	3	...	...	...	3
Explosives ...	1	...	...	...	1
Miscellaneous ...	2	...	...	...	2
	24	1	11	1	13
ON SURFACE.					
Falls of tailing ...	1	...	...	...	1
On tramways or by trucks ...	21	...	1	5	15
Machinery ...	4	...	1	2	1
Burns from paraffin lamp ...	1	...	1	...	...
Miscellaneous ...	7	...	...	6	2
	34	...	3	13	19
Total ...	58	1	14	14	32

Du-toits-pan Mine.

Work has been pushed on at this Mine most energetically. The blue ground was struck on the 28th March, on the 750 foot level, at a distance of 796 feet from the rock shaft, and at the end of the year about 3,500 feet of tunnels had been driven, in blue ground, at that level.

A shaft (No. 2) has been sunk on the north side of the open mine, in blue ground, and connected with the 750 foot level, giving good ventilation.

The top of this shaft is 129 feet below the red soil, and about 127 feet from the edge of the water in the open mine; a good deal of this water will be conveyed by syphon to this shaft, from whence it will flow to the rock shaft, and be dealt with there by the pumps and water skips—the remainder will be drained by centrifugal pumps in the open mine.

Another shaft (No. 3) is being sunk in the south-west corner of the open mine, in the rock, some 120 feet from the blue ground. The top of this shaft is 190 feet below the red soil, and at the end of the year it had been sunk 292 feet. At the 470 foot level a tunnel had been driven 80 feet towards the mine, but was still in rock.

In January of the present year the centrifugal pumps were started in the open mine, and the water is now being drained by them and the pumps and water skips at the rock shaft. It was estimated that the accumulation of water in the open mine was about 161 million gallons.

The following particulars of the plant to be erected at this mine (the pumps are already at work) from the last annual report of the Acting General Manager of De Beers will be interesting:—

“An order has been placed for two electrically driven high lift centrifugal pumps to deal with the water in the open mine. These pumps, which are being built by Messrs. Mather and Platt, Ltd., Manchester, will be capable of delivering 1,000 gallons per minute, against a total maximum head of 320 and 160 feet respectively, when running at a speed of 730 revolutions per minute. The smaller pump and motor will be floated upon a barge, the water being carried to the larger pump through hose connections. It is estimated that, pumping on an average 20 hours per day, about four months will be required to unwater the mine. Power for driving the pumps will be supplied from the Central Power Station.

“Plans have been completed for the surface and underground equipments of this mine.

“The coal will be delivered directly from the Cape Government Railways' trucks into a suspended steel coal bunker having a capacity of about 300 tons. Automatic conveyors and elevators will deliver this coal to breakers and into hoppers suspended over the boilers. From these hoppers the coal will gravitate on to mechanical stokers. The equipment will consist of five 350 horse-power Babcock and Wilcox boilers. The steam will be delivered to a man cage engine, a winding engine and an air compressor. The steam for the winding engine will be superheated in a separately fired superheater. Green's economisers will be used for heating the feed water before entering the boilers. An exhaust steam feed heater will also be installed. Suitable condensers will be provided for dealing with the exhaust steam.

“The man cage engine is being constructed by John Cochrane, of Barrhead, near Glasgow, and will consist of two simple horizontal engines, with cylinders 16 inches in diameter by 48 inches stroke. Ordinary slide valves will be used.

“The winding engine, which will be a duplicate of the Premier Mine engine, is being constructed by Messrs. Yates and Thom. It will be a cross compound vertical engine with cylinders 35 inches and 54 inches by 60 inches stroke; will have Corless valves with Seymour full stroke cut-off gear, and will be capable of hoisting 10 loads of ground per trip at a maximum speed of 3,600 feet per minute.

“*Air Compressor.*—The ‘Rand’ compressor now situated at De Beers Mine will be removed to Dutoitspan Mine, as it is too large for the work at De Beers.

“*Head Gear.*—A new steel head gear will be erected, being 90 feet from the ground level to the centre of the sheaves. This seemingly excessive height is adopted in order to allow for screening the ground at the shaft when the deeper levels in the mine are reached, thus making it possible to take out and crush the larger lumps before depositing them on the floors.

“The mechanical haulage to the floors will be operated by electrically driven drums.

“Underground, there will be three electrically-driven vertical pumps, each having a capacity of 8,000 gallons per hour against a head of 800 feet. They will be duplicates of the pumps now in use at Premier Mine. There will also be two motor generator sets for changing alternating cur-

rent into direct current at 250 volts pressure. The direct current will be delivered to five electric locomotives, which will handle the trucks on the working level between the mine and the shaft."

Area of Open Mine.—The area of the open mine is about 46 acres.

Claims and Assessment.—According to the assessment framed in November, 1903, for the year 1903-1904, the number of claims was 1,966, and the assessment £1,335,595.

Output.—The output of blue ground was 18,401 loads.

Labour.—The average number of persons daily employed is returned as follows:—Underground, 9 white and 123 coloured; on surface and open works, 39 white and 581 coloured; total, 752.

Accidents.—The following table gives particulars of the accidents reported:—

ACCIDENTS IN DU-TOITS-PAN MINE IN 1903.

Place or Cause of Accident.	No. of Separate Accidents.	No. of Persons Killed.		No. of Persons Injured.	
		White.	Coloured.	White.	Coloured.
UNDERGROUND.					
Fall of ground	1	...	...	...	1
Machinery	1	...	...	1	...
Falling down shaft	1	...	...	1	...
Falling off staging in shaft	1	...	1	...	...
Miscellaneous	1	...	...	...	1
	5	...	1	2	2
ON SURFACE AND OPEN WORKS.					
On tramways or by trucks	2	...	...	...	2
Falling from face of open mine	1	...	...	...	1
	3	...	...	...	3
Total	8	...	1	2	5

Bultfontein Mine.

There was some underground development at the levels from the 440 to the 600. In the open mine work was carried on at the 360 and 440, and on the opposite side of the mine as deep as the 345. A large quantity of reef has been hauled out of this part of the mine, and the blue ground found to be of good quality.

Water.—The average quantity of water pumped and hoisted from the mine was 9,651 gallons per hour, as compared with 7,860 for the previous year.

Area of Open Mine.—The area of the open mine is about 44.5 acres.

Claims and Assessment.—According to the assessment framed in November, 1903, for the year 1903-1904, the number of claims was 1,669, and the assessment, £695,335.

Output.—The output of blue ground for the year was as follows:—Underground, 94,569 loads; open mine, 325,466; total, 420,035 loads of 16 cubic feet. There were also hauled out of the mine 442,453 loads of "reef" or waste ground.

Labour.—The average number of persons daily employed is returned as follows:—Underground, 11 white and 46 coloured; on surface and open works, 93 white and 396 coloured; total, 546.

Accidents.—The following table gives particulars of the accidents reported:—

ACCIDENTS IN BULTFONTEIN MINE IN 1903.

Place or Cause of Accident.	No. of Separate Accidents.	No. of Persons Killed.		No. of Persons Injured.	
		White.	Coloured.	White.	Coloured.
UNDERGROUND.					
Fall from ladder	1	...	...	...	1
On tramways or by trucks ...	1	...	...	...	1
	2	...	...	...	2
SURFACE AND OPEN WORKS.					
Falls of ground	5	...	...	...	5
On tramways or by trucks ...	4	...	...	...	4
Timber thrown down open mine	2	...	1	...	1
Miscellaneous	1	...	...	...	1
	12	...	1	...	11
Total	14	...	1	...	13

Premier Mine.

There was comparatively little underground work during the year, most of the output being from the open mine, principally from the 300 and 360 foot levels.

Output.—The following was the output of blue ground:—Underground, 16,512 loads; open mine, 1,867,480; total, 1,883,992 loads, of 16 cubic feet. There were also hauled out of the mine 662,701 loads of “reef,” or waste ground.

Water Tunnel.—A water tunnel is being driven around the mine, about 300 feet from the margin of the mine, and 124 feet deep. It is in the black shale, a short distance below the basalt.

Water.—The water pumped from the rock shaft and open mine averaged 24,263 gallons per hour, as compared with 30,014 in the previous year.

Area of Open Mine.—The area of the open mine is about 23 acres.

Labour.—The average number of persons daily employed is returned as follows:—Underground, 13 white and 60 coloured; on surface and open works, 352 white and 2,529 coloured; total, 2,954.

Accidents.—The following table gives particulars of the accidents reported:—

ACCIDENTS AT PREMIER MINE IN 1903.

Place or Cause of Accident.	No. of Separate Accidents.	No. of Persons Killed.		No. of Persons Injured.	
		White.	Coloured.	White.	Coloured.
UNDERGROUND.					
Fall of ground ...	1	...	...	...	1
On tramways or by trucks ...	1	...	...	...	1
Explosives ...	1	1	...	...	...
Miscellaneous ...	2	...	...	...	2
	5	1	...	...	4
ON SURFACE AND OPEN WORKS.					
Falls of ground ...	34	...	1	...	37
On tramways or by trucks ...	43	...	...	3	40
Machinery ...	1	...	...	...	1
Falling from face of open mine	1	...	...	...	1
Explosives ...	5	...	...	...	9
Miscellaneous ...	6	...	...	1	5
	90	...	1	4	93
Total ...	95	1	1	4	97

Otto's Kopje Mine.

Nothing was done at this mine during the year except keeping the water drained; but the Company has been reconstructed, and I believe operations will shortly be resumed.

Kamfersdam Mine.

In the course of the year about 560 feet of tunnels were driven, underground, at the 260, 310 and 410 feet levels; but their work was principally in the open mine at the 210.

Output.—The output was returned as 356,150 loads of blue ground. There were also hauled out of the mine 382,109 loads of reef.

Labour.—The average daily number of persons employed is returned as 40 white and 500 coloured; total, 540.

Accidents.—The following table gives particulars of the accidents reported:—

ACCIDENTS AT KAMFERSDAM MINE IN 1903.

Place or Cause of Accident.	No. of separate Accidents.	No. of Persons Killed.		No. of Persons Injured.	
		White.	Coloured.	White	Coloured.
UNDERGROUND.					
Whilst ascending or descending shafts by machinery ...	1	...	1	...	...
ON SURFACE AND OPEN WORKS.					
Falls of Ground ...	4	...	...	...	4
On tramways or by trucks ...	1	...	...	...	1
Miscellaneous ...	1	...	1	...	...
	6	...	1	...	5
Total ...	7	...	2	...	5

Summary.

Explosives.—Returns have been kindly furnished of the quantities of explosives used in 1903, as follows:—Dynamite, 700 tons; gelatine, 18 tons; gelignite, 16 tons, total, 734 tons.

Labour.—The average number of persons daily employed in 1903, according to returns furnished, was:—Underground, 367 white, 2,851 coloured—3,218; on surface and open works, 1,914 white, 7,511 coloured—9,425; total, 2,281 white and 10,362 coloured—12,643.

Nationalities.—As far as can be ascertained, the percentage of nationalities of the white employés is as follows:—At De Beers workshops, where a considerable number of mechanics are employed, it is:—English, 41·6; Scotch, 20·3; Irish, 2·7; South African, 29·0; European, 3·4; American, 1·5; Australasian, 0·9; Other, 0·6—100. The percentage of those employed elsewhere is:—English, 40·7; Scotch, 9·1; Irish, 6·9; South African, 37·0; European, 2·2; American, 1·8; Australasian, 1·4; Other, 0·9—100.

Accidents.—There were 224 accidents reported from the various mines during 1903, from which 235 persons suffered. Of these 26 were killed on the spot or fatally injured.

The following table gives particulars of these accidents:—

ACCIDENTS IN 1903.

Place or Cause of Accident.	No. of separate Accidents.	No. of Persons Killed.		No. of Persons Injured.	
		White.	Coloured.	White.	Coloured.
UNDERGROUND.					
Mud rushes	3	...	4	...	...
Falls of ground	30	...	9	3	19
Machinery	1	...	...	1	...
Whilst ascending or descending shafts by machinery ...	2	...	1	...	1
Falling down shafts ...	2	1	...	1	...
Falling off staging in shaft ...	1	...	1	...	...
Ground falling down shafts ...	2	...	...	2	...
Timber falling down shafts ...	2	...	1	...	1
Falls from ladders	4	...	...	...	4
Falling down "pass"	1	...	1	...	...
On tramways or by trucks ...	9	...	...	1	8
Explosives	3	1	...	...	2
Miscellaneous	6	...	...	...	6
Total	66	2	17	8	41
SURFACE AND OPEN WORKS.					
Falls of ground	44	...	1	...	47
On tramways or by trucks ...	82	...	1	8	73
Machinery	5	...	1	2	2
Falling from face of open mine ...	2	...	...	...	2
Timber thrown down open mine ...	2	...	1	...	1
Burns from paraffin lamp ...	1	...	1	...	...
Explosives	5	...	...	...	9
Miscellaneous	17	...	2	8	8
Total	158	...	7	18	142
Totals (above and below ground)	224	2	24	26	183

The following table shows the death-rate from accidents, per 1,000 persons employed:—

PLACE	Death Rate per 1,000 persons employed.		
	White.	Coloured.	Total.
Underground	5.449	5.962	5.904
On Surface and Open Works ... ..	...	0.932	0.742
Totals (above and below ground) ...	0.877	2.316	2.056

Taken as a whole this is the lowest death-rate we have ever had. It will be seen that the death-rate for all persons employed, above and below ground, was 2.056 per 1,000, and but for the mud-rushes at De Beers Mine it would only have been 1.74. The average death-rate for all persons employed at the mines of the United Kingdom for the last ten years has been 1.39 for coal and 1.31 for metalliferous mines.

Underground our death-rate is naturally greater (without mud-rushes it would have been 4.66), but when we consider that more than 88 per cent. thus employed are natives, a large proportion of whom are always new hands, and quite inexperienced, I think the higher rate is easily accounted for. I believe, too, that diamondiferous mining, in itself, is more dangerous than either coal or metalliferous mining at home.

I much regret that two white men were killed, which, on the comparatively small number employed underground, makes the death-rate high. Both of these were old employes of De Beers Company, and much respected. One was the Overman of the Premier Mine, who was killed in a blasting accident, which led to a trial of the blaster, on a charge of culpable homicide, under circumstances which are fully described in the report of the Mines Inspector of Explosives. (Annexure 2.)

The percentage of natives employed underground was 88.6, and on surface and open works 79.7.

Underground.

In addition to the two white men I have mentioned 17 natives were killed underground, 13 of whom were killed by mud-rushes. and falls of ground.

Mud-rushes.—During the year there were 17 mud-rushes at different levels from the 1,240 to the 1,480, in De Beers Mine, filling 9,264 lineal feet of tunnels and passes, but only three caused loss of life. The first of these was on the 14th May, at the 1,240, when two natives were killed. The mud rushed out, without any warning, from one of the tunnels on the 1,240 and, after filling most of the tunnels on this level, went down the Prospect shaft to the 1,280, 1,320, and 1,400 foot levels. Altogether 2,365 feet of tunnels were filled. It happened about 7.15 a.m., and at that time two miners and 50 natives were working at the 1,240, all of whom escaped up the Prospect shaft with the exception of the two natives who were caught. The last person to get away was one of the miners, who had a narrow escape. He stated at the inquest:—"I had just got up half way from the 1,240 to the 1,200, and as I put my foot on the collar the ladder I had left was swept away."

The next was on the 9th October, on the west side of the 1,400, when 210 feet of tunnels were filled and one native was killed. The mud came from two chambers at the same time; deceased was filling in one and

escaped from there but was unfortunately caught by the mud from the adjoining chamber. The other mud-rush was also at the 1,400, on the 17th December, when a native was killed. At the same time there was a mud-rush at the 1,360, some of which went down one of the ladderways to the 1,440. Altogether over 1,000 feet of levels and passes were filled.

In each of these cases there were two or more means of escape, with electric lights as close as practicable to the working places.

With a view to the prevention of these mud-rushes I have in previous reports emphasised the importance of the water tunnel and the clearing of the reef from the edge of the hard rock, to allow the water to be taken into the tunnel. During the past year £10,500 have been spent on this work, and the following extract from the last annual report to the 30th June, 1903, of the Acting General Manager of De Beers Company will show the attention that is paid to the matter:—

“Mud-rushes have continued to be of frequent occurrence in this mine, but, although there were 29 rushes, only on two occasions have they been attended with fatal results, viz.: on the 1st November, 1902, two natives were killed on the 1,360 foot level, and on the 14th May, 1903, two natives were killed on the 1,240 foot level.

“The total length of tunnels filled was 15,344 lineal feet, as compared with 6,989 lineal feet for the previous year. The cost of clearing away the mud and re-timbering the tunnels, which amounts to about 20s. per foot, has been a considerable factor in our working expenses. It is, however, only a small item when compared with the loss sustained by the shutting down of many of the filling places and by the blue ground being mixed with the mud. The frequent occurrence of mud during the year has greatly reduced the output of this mine.

“Everything possible is being done to prevent mud-rushes. A new drain tunnel is being driven around the mine in the hard rock just below the black shales. It is expected that this will take up some of the water, which now finds its way into the mine and causes the mud. This work is not far enough in advance to say what the result will be. Judging from the appearance of the open mine, it should not be long before the hard rock is exposed. It is to be hoped that when this does appear we will be able to collect all the water, and thus end mud-rushes, as in the case of Kimberley Mine.

“A number of natives have been employed during the year clearing the reef from the top of the hard rock, for the purpose of collecting the water. Large falls of reef have continually occurred, and on several occasions the work of months has been completely destroyed by a single fall.”

Falls of Ground.—There were 30 accidents from falls of ground, by which 9 natives were killed and 3 white men and 19 natives injured. Of the 9 natives killed 7 were employed at De Beers Mine and 2 at Kimberley. Careful inquiries were made into these accidents and, as far as could be ascertained, due care was observed by the miners in charge, but the ground is very treacherous and full of joints. After several of the accidents it was apparent that the ground had fallen from joints, or “soapy backs,” which were not visible before.

Whilst Ascending or Descending Shafts by Machinery.—This was an accident at Kamfersdam Mine on the 4th May. A prospecting shaft had been sunk in the bottom of the open mine and some natives were being sent down in the cage when the deceased, who apparently tried to get in the cage as it was starting, got crushed between the cage and the side of the shaft. A native, who had rung the cage away, seeing the accident signalled for the cage to be taken up, which was at once done, but deceased was so badly injured that he died on the 25th May. The

native who rung the bell on this occasion said he had been acting as bell-man for the last three weeks. This was denied by the Mine Foreman, who stated that since the bell-man left, about a week previously, he had himself superintended the sending of the natives in and out of the mine, that just before the accident he was at the top of the shaft when there was a smash at No. 1 gear, that he went to see to it and consequently was away when the accident happened, but that when he left he gave orders that the bell was not to be rung until his return. This was denied by the native who had rung the bell. According to the evidence the guard-bar of the cage was not in position at the time of the accident. Proceedings were subsequently taken in the Magistrate's Court against the Mine Overman for contravention of the rules in connection with this accident, and he was fined £5.

Falling Down Shaft.—This was the accident to a contractor in De Beers Mine to whom I have already referred. He was superintending the timbering of the rock shaft below the 1,720 on the 24th November, and, while taking some measurements, slipped off the plank on which he was standing and fell 27 feet, receiving injuries from which he died next day.

Falling off Staging in Shaft.—This was an accident in No. 2 shaft, of Du-toits-pan Mine, on the 14th November, when a native was killed. A small rise from the 750 foot level had been put up and communicated with the shaft, which was much larger, and at the time of the accident the sides of the rise were being blasted down to make it the size of the shaft. For the purpose of covering over the rise a stage was used, supported by ropes at each end, which was about the size of the rise, and which was taken up during the blasting, and afterwards lowered into position again. The miner in charge fixed the stage at the commencement of the shift, and put the boys to drill in the sides, particularly telling them to stand on the ledge of blue in which they were drilling, where there was plenty of room, and not to go on the stage. He went to the top of the shaft to prepare the charges for blasting, and the deceased walked across the stage and slipped down the shaft.

Timber Falling Down Shaft.—This was an accident on the 11th April, at Kimberley Mine prospect shaft, that was being sunk in the rock, and was then nearly 100 feet below the 2,160, which was the top of the shaft. The collar of the shaft is about 3 feet above the floor of the level, and is closely timbered at the sides; the top is also covered over, with the exception of two doors that are hung in the centre, so that nothing could fall down the shaft except through the doors, when open. On the occasion of the accident the doors were open because the bucket was being drawn up. The banksman was close to the shaft, looking towards the engine, and, on hearing a noise, turned round and saw a sleeper falling over the door into the shaft. This sleeper was 2 feet 6 inches long, by 6 inches 4 inches, and struck one of the natives, who was working in the bottom of the shaft, on the head, injuring him so severely that he died shortly afterwards.

Sleepers were only used in the shaft for making a stage to stand upon when drilling in the high ground.

The native who put the sleeper there said he heard them calling for sleepers at the bottom of the shaft, and he put one upon the door, in readiness for the next bucket, and it slipped down the shaft. The banksman did not hear them asking for sleepers, and did not tell the native to get any, nor should he have put the sleeper on the top of the shaft until the bucket was up and the doors closed.

The Magistrate returned the following verdict:—"I find that death was the result of injuries sustained from a falling sleeper, negligently placed on the door of the shaft at Kimberley Mine, by one Jackson Mapanyela."

By the direction of the Crown Prosecutor a Preliminary Examination was afterwards held, on a charge of Culpable Homicide, against this native; and he was subsequently tried in the High Court and acquitted.

Falling Down "Pass."—This was an accident at the Kimberley Mine, on the 13th February, when a native fell down the pass from the 1,640 to the 1,840. He was an old hand, a drill boy, and the accident happened at the middle of the shift. He had no business at the pass, and it is difficult to understand how he could have fallen into it. The entrance is not more than 3 feet wide, and the guard bar is only 3 feet above the floor. It was conclusively proved that this bar was in position at the time, and there was a stationary light within 6 feet of the pass. At the Inquest the Magistrate returned the following verdict:—"I find that death was due from fracture of the skull by falling down a pass at Kimberley Mine, apparently with the intention of committing suicide."

On Surface and Open Works.

Falls of Ground.—There were 44 accidents reported from this cause, but only one was attended with fatal result. This was at the Premier Mine, on the 10th February, when a native was killed by a fall of ground from a soapy joint, and which, I believe, was a pure accident.

On Tramways or by Trucks.—There were 82 accidents from this cause, of which only 1 was fatal; 8 white men and 73 natives being injured. The fatal accident was on the 7th March, near the coal shed, at De Beers Mine, when a native was killed, owing to the wheels of a coal truck passing over his legs. He had been engaged with others in unloading two railway trucks of coal, and, after this was finished, they were pushing away the two empty trucks, which were coupled, owing to there being no brake on one. Deceased was pushing the front truck, and, when they were started, he came away and tried to get over a small ridge of coal, some of which gave way under his feet, and he slipped back on the line, and the wheels of the truck passed over his legs before it could be stopped by the brake.

Machinery.—The accident from this cause was on De Beers floors, on the 27th February, when a convict was killed through being caught between two cog wheels of the pulsator. He was cleaning the machinery in the morning before it started, which is not usual, but it appeared from the evidence at the Inquest that he occasionally did this. The orders are very strict that the machinery must not be cleaned whilst in motion, and a whistle is blown a minute or two before starting, to warn everyone to stand clear of the machinery. On this occasion it was clearly proved that the whistle was blown as usual, but the deceased did not get away. Another convict, seeing the accident, signalled to stop the machinery, which was at once done. This morning the overseer, who was in charge of the section where deceased worked, was half an hour late, so that he was not present when the accident happened.

The Crown Prosecutor made the following remarks on the case:—"The evidence discloses some necessity for stricter supervision of shifts. The accident occurred owing to the machinery being set in motion, although the warning bell was duly rung, before the proper supervision of deceased's section was present; this clearly should not be permitted."

Timber Thrown Down Open Mine.—This was an accident at Bultfontein Open Mine, on the 20th April, when a native, who was passing

at the 360 foot level, was killed by a blow from a plank, 10 feet long, which was thrown down by another native, from the 300 foot level. Very strong remarks were rightly made by the Magistrate and the Crown Prosecutor upon this dangerous practice. There was a rope in position at the spot for lowering timber, etc., but too often it was apparently not used. Steps have since been taken to ensure its being used for this purpose.

Burns from Paraffin Lamp.—This accident was at No. 4 machine, at De Beers floor, on the 26th March. It is the custom during the night to clean out the cylinder, through which the ground passes to the washing machine, and other portions of the machinery. At the time of the accident, 8.30 p.m., two natives were employed at this work, one was in the cylinder and the deceased was in the hopper below. Each had a paraffin lamp, and by some means the clothes of the deceased got ignited by his lamp. He rushed out and was immediately attended to by the mechanic in charge, who put out the flames, and took him to the Hospital, but he died from his injuries on the 5th April.

Miscellaneous.—Of the two fatal accidents in this class the first was at Kamfersdam Mine, on the 7th May, when one of the natives, who was employed in cleaning the spillage in the pole pit in the open mine, was caught by the descending bucket and so badly hurt that he died two days afterwards. Two natives were employed at this work. It is their duty to fill the spillage into the tubs and to shift from side to side, as each tubs ascends and descends. There is also room on each side of the standing wires.

The Crown Prosecutor made the following remarks on the Inquest proceedings:—"I concur in the verdict of accidental death. Deceased had been expressly cautioned as to avoiding the bucket, and, I think, showed contributory negligence."

The other accident was at Kimberley Mine, on the 26th September, when a native was killed through falling into the hot well near the pumping engine. This is a large reservoir, into which the condensed steam from the engines is discharged. At the time of the accident the water was 7 feet 6 inches deep, and had a temperature of 117°. The deceased was closing a valve in a pipe at the side of the reservoir. He was using a spanner and standing upon two 6-inch horizontal pipes, side by side, and a short distance apart; in the hollow, between these pipes, there was a small pipe. This was 3 feet 6 inches above the water. The engine-man, who was with him, had to go back to the engine-house, as the feed-lift had lost its water, when he heard a splash, and at once came back and found that the native had fallen into the reservoir. He was dead before he could be got out. The valve had been easily opened that morning. There was a rail near the valve, around which the person using the spanner put his arm, and with ordinary care he would not fall; a platform has since been fixed.

The other accidents do not call for special notice.

Explosives.—These accidents are described in the report of the Mines Inspector of Explosives. (Annexure 2).

Prosecutions.

In addition to the prosecutions referred to in this report, and in that of the Mines Inspector of Explosives, proceedings were taken before the Magistrates of Kimberley and Beaconsfield, for contravention of the Mining Rules and Regulations, in the three following cases:—

A contractor was fined £10 for neglecting to have a pass fenced at the 1,000 foot level, of Kimberley Mine, on the 24th June.

A bell-man, at the top of the rock shaft, at Premier Mine, was fined £15 for signalling to the engineman, on the 9th September, to take up the cage from the 600 foot level, before he received the signal from below. On this occasion two natives had put a truck of blue ground in the cage, and one was standing in the cage and leaning over the end of the truck to shift a lump of the blue ground, so that the guard bar might be put in position, when the cage was taken away and he was carried up to the back of the station and badly crushed against the shaft timbers.

A native was fined £5 for attempting to get into the cage at the 600 foot level, at Premier rock shaft, on the 17th August, after it had been rung away, and against the orders of the onsetter. He tried to get under the guard bar, and just then the cage was taken away, and he over-balanced himself and fell down the shaft, about 70 feet. Fortunately there was some water in the shaft, which broke the fall, and he escaped with severe injuries.

General Remarks.

Output and Persons Employed.—The following table gives the number of persons employed and the output, for the last six years, at the Mines referred to in this report:—

	1898.	1899.	1900.	1901.	1902.	1903.
Number of persons employed:—						
White... ..	1,990	1,928	1,857	2,085	2,107	2,281
Coloured	10,293	10,751	7,365	9,145	9,949	10,362
Output: Loads of 16 cubic feet	6,760,591	6,167,202	3,257,504	5,412,472	5,021,837	5,192,606

Reef Haulage.—During 1903 there were hauled, out of the various Mines, 1,624,888 loads of “reef,” or waste ground.

St. John Ambulance Classes.—I referred in my last report to the great value of these classes and the excellent work done at the Mines by the members. At the annual meeting of the Cape Colony centre, at Cape Town, on the 20th November, the following reference was made in the annual report to the De Beers section:—

“The De Beers section at Kimberley still holds its own as the most active and efficient section of the centre, having, during the past year, examined 102 pupils, 97 of whom proved themselves qualified to render First Aid to the injured, and who have been awarded the certificate of the Association. Of these 97, 15 were re-examined for the first time, and one finally, the latter receiving the gold medallion of the Association, generously presented by the directors of the De Beers Consolidated Mines, Ltd.”

In this connection it is very gratifying to note that the Association has presented to Messrs. G. B. Drew and A. Cruickshank (who commanded Nos. 1 and 2 Companies of the Medical Corps during the siege) its Vellum Vote of Thanks “for distinguished services in aid of the sick and wounded during the recent South African Campaign.”

Geological Sections of Rock Shafts.—The interesting plans attached to this report have been kindly furnished by the General Manager of De Beers Company. One gives the geological sections of the rock shafts at Kimberley, De Beers, Bultfontein, Dutoitspan and Premier Mines, from a datum line of 4,000 feet above tide level. The other shows the relative

positions of the said mines, with surface contour lines at various elevations.

Rainfall.—The following has been the rainfall in Kimberley during the last seven years:—1897, 14 inches; 1898, 18 inches; 1899, 19 inches; 1900, 17 inches; 1901, 24·4 inches; 1902, 18·27 inches and 1903, 11·20 inches.

Machinery.—I annex a return of machinery at the Diamond Mines in 1903 (Annexure 1).

Barkly West Mines.

During the year I made several visits of inspection to the Elands Drift and Frank Smith Mines, in connection with the underground work which is now being carried on at these Mines.

COAL MINES.

The output of coal for 1903 was 207,493 tons, being an increase of 22,069 tons on 1902, which, for reasons explained in my last report, was the lowest output for the last five years.

Nearly all the mines could have still further increased their output if there had been a demand for the coal and a better supply of native labour.

I have divided the coal mines into the usual districts, viz.:—

- A. Indwe Mine.
- B. Cyphergat and Wallsend Companies.
- C. Molteno Mines, Nos. 1 and 2; Penshaw Collieries, Westmead Colliery, etc.
- D. Romansfontein Mine, New Cape Collieries, the Mines on Zandfontein, and Contat's Collieries.

Output and Persons Employed.—The following table gives the returns of output, and average number of persons employed for the years 1898, 1899, 1900, 1901, 1902, and 1903:—

District.		Coal Wrought in Tons of 2,000 lbs.	Persons ordinarily employed during the year.								Total underground and above ground.
			Underground.			Above Ground.					
			White.	Coloured.	Total underground.	Males.		Females.		Total above ground.	
						White.	Coloured.	White.	Coloured.		
1898	A	107,233	41	781	822	21	99	...	141	261	1,083
	B	47,304	22	751	773	10	55	...	25	90	863
	C	27,119	11	354	365	10	49	...	14	73	438
	D	10,202	21	397	418	11	63	...	104	178	596
	Totals	191,858	95	2,283	2,378	52	266	...	284	602	2,980
1899	A	132,603	46	1,018	1,064	25	100	...	146	271	1,335
	B	39,104	20	752	772	8	27	...	15	50	822
	C	23,904	10	362	372	6	28	...	10	44	416
	D	13,044	19	322	341	9	50	...	13	72	413
	Totals	208,655	95	2,454	2,549	48	205	...	184	437	2,986
1900	A	129,009	46	1,015	1,061	40	303	...	193	536	1,597
	B	24,587	12	331	343	7	28	...	17	52	395
	C	19,127	10	478	488	8	24	...	25	57	545
	D	25,728	30	729	759	18	69	...	74	161	920
	Totals	198,451	98	2,553	2,651	73	424	...	309	806	3,457
1901	A	129,819	34	920	954	30	130	...	160	320	1,274
	B	23,560	13	234	247	7	27	...	16	50	297
	C	26,827	13	319	332	5	51	...	24	80	412
	D	25,604	17	474	491	9	34	...	71	114	605
	Totals	205,810	77	1,947	2,024	51	242	...	271	564	2,588
1902	A	116,154	42	653	695	35	120	...	110	265	960
	B	24,350	12	205	217	6	21	...	15	42	259
	C	26,208	13	379	392	9	38	...	33	80	472
	D	18,712	19	356	375	5	77	...	48	130	505
	Totals	185,424	86	1,593	1,679	55	256	...	206	517	2,196
1903	A	133,584	40	614	654	29	219	...	137	385	1,039
	B	21,550	11	243	254	7	23	...	15	45	299
	C	26,762	14	372	386	7	34	...	29	70	456
	D	25,597	15	367	382	8	36	...	80	124	506
	Totals	207,493	80	1,596	1,676	51	312	...	261	624	2,300

The following table gives the monthly production of each district for 1899, 1900, 1901, 1902, and 1903:—

District.		Jan.	Feb.	Mar.	April	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total tons.
1899	A	10,513	11,344	13,618	11,962	12,763	11,258	11,618	14,589	14,738	12,393	7,746	61	132,603
"	B	3,329	3,942	3,762	3,585	3,324	3,431	2,990	3,403	3,523	3,574	2,928	1,313	39,104
"	C	2,561	2,618	1,658	2,238	2,339	2,304	2,095	2,332	2,291	1,799	1,669	...	23,904
"	D	470	498	570	704	1,106	1,599	1,558	1,709	2,351	1,934	545	...	13,044
"	Total tons	16,873	18,402	19,608	18,489	19,532	18,592	18,261	22,033	22,903	19,700	12,888	1,374	208,655
1900	A	119	84	4,574	6,807	10,894	14,393	16,802	16,280	14,502	16,965	15,806	11,783	129,009
"	B	1,583	1,148	1,232	1,650	1,893	2,044	2,039	2,617	2,575	3,178	2,797	1,831	24,587
"	C	...	466	484	1,055	1,683	1,881	2,099	2,155	2,400	2,657	2,701	1,546	19,127
"	D	...	...	403	1,508	1,425	1,905	2,570	3,322	3,453	4,317	3,672	3,153	25,728
"	Total tons	1,702	1,698	6,693	11,020	15,895	20,223	23,510	24,374	22,930	27,117	24,976	18,313	198,451
1901	A	14,819	11,803	11,557	11,277	10,764	9,807	11,569	11,626	9,011	8,939	8,904	9,743	129,819
"	B	2,281	1,662	2,086	1,367	1,871	1,711	2,020	2,589	1,912	2,178	2,212	1,671	23,560
"	C	2,248	2,097	2,785	2,833	2,801	2,570	1,983	2,277	1,504	1,873	2,082	1,771	26,827
"	D	3,363	3,037	3,395	2,649	2,316	1,833	1,602	1,836	1,346	1,460	1,376	1,391	25,604
"	Total tons	22,711	18,599	19,823	18,129	17,752	15,921	17,174	18,328	13,773	14,450	14,574	14,576	205,810
1902	A	10,938	9,202	9,123	8,898	8,525	6,217	9,391	10,449	10,266	10,916	10,770	11,459	116,154
"	B	2,188	1,832	2,237	2,335	2,365	1,379	2,226	1,967	1,863	2,197	1,980	1,781	24,350
"	C	2,061	1,961	2,068	2,215	2,218	1,308	2,297	2,277	2,065	2,828	2,569	2,341	26,208
"	D	1,594	1,357	1,424	1,200	1,114	814	1,318	1,787	2,019	1,973	2,030	2,082	18,712
"	Total tons	16,781	14,352	14,852	14,648	14,222	9,718	15,232	16,480	16,213	17,914	17,349	17,663	185,424
1903	A	11,203	12,814	14,105	11,983	11,526	9,797	11,486	10,626	9,807	10,809	9,995	9,433	133,584
"	B	1,912	1,701	1,597	1,922	1,893	1,564	2,050	1,829	1,842	2,183	1,515	1,542	21,550
"	C	2,655	2,447	2,426	2,388	2,368	2,381	2,483	2,188	1,804	1,984	1,752	1,886	26,762
"	D	2,474	1,934	1,934	2,204	2,114	2,280	2,328	2,410	2,425	2,481	1,491	1,522	25,597
"	Total Tons	18,244	18,896	20,062	18,497	17,901	16,022	18,347	17,053	15,878	17,457	14,753	14,383	207,493

Value of Output.—The following table gives, as far as I can ascertain, the value of the output, *at the Mines*, for the last 6 years:—

Date.			Tons.	Value £	Average per Ton.
					S. D.
1898	...	...	191,858	119,000	12 5
1899	...	...	208,655	133,650	12 10
1900	...	...	198,451	152,581	15 4½
1901	...	...	205,810	180,422	17 6
1902	...	...	185,424	158,929	17 1½
1903	...	...	207,493	178,851	17 3

Fire-clay.—The output of fire-clay was 440 tons in 1897, 1,240 tons in 1898, 1,260 tons in 1899, 1,090 tons in 1900, 900 tons in 1901, 670 tons in 1902, and 600 tons in 1903, practically the whole of which was from the Cyphergat Company.

Explosives.—The quantity of explosives used in 1903 was 31 tons of powder and 1¼ tons of dynamite.

District A.

The only Mining Company in this district is the Indwe Railway Collieries and Land Company, Limited, which produced over 64 per cent. of the total output for the year, from the following mines:—

Dugmore Mine	...	...	...	...	...	...	75,550 tons.
Byrne Mine	...	...	...	...	...	...	43,268 „
Green Mine	...	...	...	...	...	...	14,766 „
							133,584 „

— This is an increase of 17,430 tons on the previous year.

The erection of the plant described in my last report has been completed, and development was vigorously pushed on during the year, especially at Dugmore Mine. There are now at work ten Jeffrey Electric Coal Cutters, as they may be required, and three electric Locomotives underground; two additional Locomotives are on hand to provide for contingencies.

During the year 50,376 tons of coal were cut by machinery, of which 44,354 were at the Dugmore Mine.

Experiments in coal-washing have been made which have been very successful.

District B.

The output from this District was 2,800 tons less than in the previous year. There were only two mines at work—Cyphergat and Wallsend. There was practically nothing done at the Klaap Kloof Mine, Sterkstroom.

Cyphergat Company.—This Company produced 16,411 tons from the following mines, numbered from north to south:—

No. 1 Mine	6,849 tons.
No. 3 Mine	4,850 „
No. 2 Mine	2,705 „
No. 7 Mine	2,007 „
	<hr/>
	16,411 „
	<hr/>

The Company is having erected new brick-making machinery, by Bradley and Craven, Ltd., of Wakefield, England, with all the latest improvements, which will greatly reduce the cost of production and enable them to increase the output, in order to supply the increasing demand, which they have been unable to do with the old plant.

District C.

There was no new feature in this district, the output of 26,762 tons being an increase of 534 tons on the year.

District D.

The output from this district, 25,597 tons, was an increase of 6,885 tons, which was derived from the New Cape Collieries, and the mines on Zandfontein, the other mines showing a slight falling off.

Accidents.

The following table gives particulars of the accidents reported during the year:—

Place or Cause of Accident.	No. of Separate Accidents.	No. of Persons Killed.		No. of Persons Injured.	
		White.	Coloured	White.	Coloured.
UNDERGROUND.					
Falls of Roof	4	...	2	...	2
Fall of Coal	1	...	...	1	...
By Coal-cutting Machines ...	2	...	...	...	2
By Electric shock	1	...	1	...	...
On Tramways or by Trucks ...	2	...	...	...	2
Explosives	1	...	...	...	1
Total	11	...	3	1	7

The following table shows the death-rate from accidents, per 1,000 persons employed, for 1898, 1899, 1900, 1901, 1902, and 1903:—

Year.	Place.	Death-rate per 1,000 persons employed.		
		White.	Coloured.	Total.
1898	Underground	10.526	3.066	3.364
	On Surface ... ..	...	5.454	4.983
	Totals (above and below ground) ...	6.802	3.526	3.691
1899	Underground	10.526	2.444	2.746
	On Surface ... ..	...	...	...
	Totals (above and below ground) ...	6.993	2.110	2.344
1900	Underground	20.408	2.350	3.018
	On Surface ... ..	...	4.092	3.722
	Totals (above and below ground) ...	11.696	2.739	3.182
1901	Underground ... ..	...	2.054	1.976
	On Surface ... ..	...	...	...
	Totals (above and below ground) ...	...	1.626	1.545
1902	Underground ... ..	...	2.511	2.382
	On Surface ... ..	...	...	...
	Totals (above and below ground) ...	...	1.946	1.821
1903	Underground ... ..	...	1,880	1,790
	On Surface ... ..	...	...	...
	Total (above and below ground) ...	...	1,383	1,304

The percentage of natives employed underground was 95, and on surface 91.

Underground.

All the accidents were underground and, with the exception of the one in connection with explosives, which was at Cyphergat, were at the Indwe Mines.

Falls of Roof.—There were 4 accidents from this cause, 2 natives being killed and 2 injured. The first fatal accident was at the Dugmore Mine, on the 30th April, when a native who was passing through one of the rooms, close to the face, was killed by a fall of roof, which came away without any warning from a soapy joint that was not visible before the fall. The Contractor was in the place a few minutes previously. I examined the place soon after the accident and was satisfied that it had been timbered in accordance with the special rules. I measured the slab which fell (hard sandstone, which is the roof formation) and found it 11 feet long by 5 feet 4 inches wide and 1 foot thick in the middle, tapering off towards the edges. The line of timbering was across the narrow part of the stone, which fell just between two props, carrying one with it. The rule provided that props should be fixed not more than 6 feet apart, which was carried out. I discussed the question with the General Mining Manager and, with a view to reducing the risk of similar accidents in future, we drafted a new rule which I asked the Under Secretary for Agriculture to have substituted for the rule then in force. The new rule provides that props from floor to roof, along the face, shall be kept set not more than 4 feet apart. It was subsequently promulgated by Proclamation No. 200 of 1903, dated 3rd July, and is as follows:—

1. Every Contractor or Miner in charge shall, when holing or under-cutting coal, see that sufficient sprags, or holing props, are set as soon as there is room; such sprags, or holding props, shall be set not more than six feet apart, and shall be kept set during the whole time of holing or drilling, or whilst any person is engaged near the coal face, and shall not be removed until actually necessary for the purpose of wedging, or blasting, or otherwise bringing down the coal. Should the measures taken fail to bring down the coal, he shall see that the holing is not resumed, nor any work done near the face, until the sprags, or holing props, have been cautiously reset. He shall also see that every loose end is securely spragged before commencing to hole, and that no overhanging coal shall, under any circumstances, be allowed to remain unspragged. After a fall of coal he shall carefully examine the roof and sides, and see that they are secured before commencing to load the tub or tram.

2. Every Contractor or Miner in charge shall see that in all working faces props are kept set, from floor to roof, not more than four feet apart, and as close to the face as may be ordered from time to time by the Manager of the Mine. He shall also see that along the packed side of each gateway props are kept set not more than four feet apart, which shall not be removed unless a good solid pack is built tightly up to the roof.

The other fatal accident, from fall of roof, was also at Dugmore Mine, on the 4th September, when a native who was pick-shafting was killed. In this case the part of the roof which fell was a long narrow piece from between the props and the working face. The props were in position when I inspected the place, and it was properly timbered. The ground fell, as in the previous case, from a slippery joint in the roof and I believe it was simply an accident.

By Electric Shock.—This was the first accident that has happened from this cause. It was at the Dugmore Mine on the 27th June, when a native was killed through coming in contact with the electric wire of the haulage system. This wire is taken along the top of the tunnel and towards one side. The native in attempting to cross between two trucks, which he need not have done, struck the wire with his mouth and was tightly held by it. He was quickly taken away and attempts were made to bring about artificial respiration, but in vain. At the time he was caught one arm was resting upon a truck and his feet were in a little water that had accumulated between the rails. The installation has a pressure of 500 volts. Separate travelling roads had been provided to prevent, as far as possible, persons travelling along the haulage, and since the accident the wire has been shielded, at my suggestion, by a thin slip of wood, carried along near it, which will have a tendency to prevent similar accidents in future.

Explosives.—This was an accident at Cyphergat Mine on the 22nd May, when a native got slightly burnt. He was carrying some powder into the mine in a tin, had forgotten to put the lid on and a spark from his pipe ignited the powder.

The other accidents do not require special reference.

Prosecutions.

Proceedings were taken before the Magistrate at Molteno on the 23rd July, against the Manager of the Penshaw Collieries, Ltd., for con-

travening the latter clause of Rule 4 of the "General Rules and Regulations for the Working of Coal Mines." When I visited the mines on the 14th and 15th July, I found 3 mines were being worked, two of which were half a mile apart and the other about 3 miles away; most of the pick-shafting being done on the night shift. The Contractor was the only white man to look after the whole of the underground workings. Accused was fined £5 and costs.

I referred to this matter in my last report, and I have frequently cautioned the managers of the mines as to the necessity for having sufficient white supervision. After this case I again wrote, calling their attention to it.

THOS. QUENTRALL,

Inspector of Mines.

ANNEXURE I TO THE REPORT OF THE INSPECTOR OF MINES, KIMBERLEY.

Return of Machinery at the Diamond Mines in 1903.

	Kimberley Mine.	De Beers Mine and Workshops.	Dutoitspan Mine.	Bultfontein Mine.	Premier Mine.	Otto's Kopje Mine.	Kamfersdam Mine.	GRAND TOTALS.
Winding and Haulage Engines :—								
Number ...	12	14	5	5	5	3	5	49
Indicated horse-power ...	1,460	1,817	145	226	475	190	403	4,716
Washing Engines :—								
Number ...	6	8	...	3	2	2	1	22
Indicated horse-power ...	585	2,160	...	150	435	200	400	4,020
Pumping Engines :—								
Number ...	4	12	...	3	5	3	1	28
Indicated horse-power ...	216	353	...	38	280	23	8	918
Other Mining Engines :—								
Number ...	11	42	8	7	25	1	1	95
Indicated horse-power ...	483	1,361	62	113	408	12	6	2,445
Total Engines at each Mine :—								
Number ...	33	76	13	18	37	9	8	194
Indicated horse-power ...	2,744	5,691	207	527	1,598	515	817	12,099

ANNEXURE 2 TO THE REPORT OF THE INSPECTOR OF MINES,
KIMBERLEY.

REPORT OF MINES INSPECTOR OF EXPLOSIVES,
KIMBERLEY.

Sir,—Subjoined I have the honour to submit to you a report showing the number of persons killed and injured in the Diamond Mines, by the use of explosives during the year ended the 31st December, 1903:—

Kimberley Mine.

Europeans: Nil.

Coloured: 1 injured.

The injured native had been assisting the European contractor to light fuses in a chamber, on the 1,280 feet level, and, when they were nearly down out of the chamber, one of the charges exploded frightening the native, who fell the remaining distance, slightly injuring himself. The fuse in this case burnt through quicker than the others, as it was over a minute before the other charges exploded.

De Beers Mine.

Europeans: Nil.

Coloured: 1 injured.

The European miner had charged 5 holes in one tunnel and 4 in the other; these tunnels were opposite to each other and driven a short distance. He cleared out all the natives, and placed guards to prevent any one approaching the blasting. He lit 8 fuses, and being unable to light the ninth, left it till the eight had exploded and then lit it; the guards thinking all the holes had exploded, allowed the natives to approach, when a small piece of ground from the ninth hole bounded round the corner and along the tunnel, striking and slightly injuring a native.

Premier Mine.

Europeans: 1 killed.

Coloured: 9 injured.

The European killed was the overman of the underground workings, and was making his usual inspection of the work in progress on the 420 feet level, and on going into an off-sett to see if a rise coming up from the 460 feet level was connected, a charge of dynamite from the rise exploded and blew through into the offset, as intended, inflicting such injuries upon him that he died shortly afterwards.

Blasting rule 11, section 4 reads: "Before firing a shot in any place which is likely to be holed by such blast into another place, the person about to fire the shot shall first examine the place into which he is likely to hole, and satisfy himself that no person is in it at the time; and every person about to fire such a shot shall take precautions to prevent any person going past the end of such place until after the shot is exploded."

If this rule had been carried out, this fatality would have been prevented.

The European who did the blasting was tried on the charge of culpable homicide, but was acquitted by the Jury.

One native was injured by a small piece of ground striking him on the leg during blasting operations. He and other natives had been taken out of the open mine for safety into a cutting, between three and four hundred yards from the blasting, and the piece of ground was thrown out of the mine by one of the exploding charges.

Two natives were injured by the explosion of an old hole in the open workings. The European blaster was chambering deep holes in the working face (this chambering is the explosion of a small cartridge of dynamite in the bottom of the hole to clean it out before charging it) and the natives had been taken back for safety as usual while this was being done, when the old hole exploded and these two natives were struck by ground from the explosion. It was a high working face in which a lot of blasting had been done, the old hole was not known to exist, and the European blaster was standing near when it exploded.

One native picked up a short piece of fuse, with a detonator attached, on the floors, and, though warned by other natives not to do so, lit it and watched the detonator explode, with the result that he received injuries to his face.

Another native was injured by the explosion of a detonator. The European blaster found a short piece of fuse, with a detonator attached, in the open mine and lit the fuse and threw it into the water furrow to destroy it, when the injured native, who was working at the back of a shelter house, attracted by the smoke from the water, went and pulled it out; as he did so the detonator exploded, injuring his hand. The blaster did not know the native was there, and could not see him from where he was.

Four natives were injured by an explosion while loading trucks in the open mine. One of the injured natives was breaking a lump of blue-ground with a pick, when he struck some dynamite which exploded; on examination of the spot I found small portions of dynamite, the remainder of an unexploded charge, mixed with the ground they were filling. Fortunately they were not seriously injured, as the explosion was a light one.

Bultfontein Mine: Nil.

Dutoitspan Mine: Nil.

Kamfersdam Mine: Nil.

Prosecutions.

Three Europeans working at Kimberley Mine were summoned for offences against the Mining Rules and Regulations, one was fined £2 for allowing a native to charge a hole with dynamite; one was fined £5 for not guarding the end of a tunnel during blasting operations, and the other, who was charged with neglecting to guard tunnels during blasting, was acquitted on a technicality raised by the defending attorney. The Magistrate severely reprimanded him, and he was for some months prohibited from using explosives and put to fill a reduced position in the mine.

I have the honour to be, Sir,

Your obedient servant,

R. A. SKELDING,

Mines Inspector of Explosives.

ANNUAL REPORT.

INSPECTOR OF CLAIMS, BARKLY WEST.

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II.—REPORT OF THE INSPECTOR OF CLAIMS, BARKLY WEST FOR THE YEAR 1903.

In this Report the usual Annexures are put in, namely, Recapitulation of Mines and Diggings in the Barkly West Division, including the proclaimed Diggings in the Kimberley Division, and a detailed statement of Revenue collected during the year.

Revenue.—The Revenue collected during the year 1903 amounted to £13,931 11s., made up as follows:—

Licences, Alluvial Diggings	£7,183	10	0
„ Leicester Mine	65	0	0
„ Smith's Prospect Mine	2,878	0	0
„ Otto's Prospect Mine	1,118	0	0
„ Jubilee Prospect Mine	1,642	0	0
Miners' Certificates	775	15	0
Transfer Certificates	267	15	0
Reservation Certificates	1	11	0
Total	£13,931	11	0

Of this amount, £3,602 was received from the proclaimed Alluvial Diggings in the Kimberley Division, the balance, £10,329 11s., being Revenue collected from the Alluvial Diggings and Mines in the Barkly West Division.

It will be noted that the Revenue derived from the Alluvial Diggings in the Barkly West Division as regards Digger's Licences and Miners' Certificates, exceeds that of the preceding year by £849 15s., while the Revenue collected under the same heads from the proclaimed Alluvial Diggings in the Kimberley Division shows an increase of no less than £2,924; this, however, is owing to the large holding in the Robinson Kopje Digging of the Windsorton Diamonds, Limited. Transfer dues show also an increase of £212.

The approximate weight and value of diamonds imported into Kimberley from Barkly West during the year 1903 (data kindly supplied by the Detective Department), were 70,801 carats, value £255,402.

Alluvial Diggings.—Three Proclamations of Alluvial Diggings have been issued during the year.

The first, Proclamation No. 84 of 6th March, 1903, proclaimed portion of Farm N. W. 9 as an Alluvial Digging under the name of Ver-vanhier.

The second, Proclamation No. 367 of 4th December, 1903, proclaimed that the Scholtz Prospect Digging comprise an additional Area as defined in the Schedule attached.

The third, Proclamation No. 371 of 11th December, 1903, reproclaimed certain eliminated Areas in the proclaimed Alluvial Digging of Van Zoelen's Laagte.

Deep Alluvial.—The Deep Alluvial at Waldeck's Plant known as Smith's Gully, touched upon in former reports, and in which Messrs. Smith and MacLuckie still have a holding of 40 claims, has not (although continuous work has been done during the year), realized the expectations formed. Messrs. Smith and MacLuckie, however (still hopeful), are pushing on work.

Proclaimed Alluvial, in Kimberley Division.—The Windsorton Diamonds, Ltd., have a holding of 580 claims in the proclaimed Alluvial

Digging of Robinson's No. 1, and machinery for the purpose of testing the ground is now in course of erection, in fact, I may say almost completed.

MINES.

Smith's Prospect Mine.

In this Mine, in which the Frank Smith Diamond Estate and Exploration Company, Limited, hold 437 claims, the open workings from the 75 feet level have been continued during the year, and washing operations (treating yellow ground) were commenced with a new and improved gear on 1st June, 1903, and have been continued ever since, with the exception of a short stoppage in September to erect a Gates Crusher and some additional machinery.

Owing to the powerful machinery now erected, ground of whatsoever nature is taken from the Mine in a thoroughly systematic manner, the reef being tipped from separate lines, etc., and the yellow ground, whether in large lumps or fine, is effectually treated by the crusher and reds.

The haulage is now approximately 1,000 loads per diem.

From the commencement of the present Company's operations 229,937 loads have been hauled, from which 157,652 loads of diamondiferous ground have been passed through the washing pans.

Underground working was started during the month of May, 1903, when two vertical shafts were put down to a depth of 200 feet, at which level a connecting was made by a tunnel 365 feet in length, various drives were made, and 928 feet of blue ground excavated, 3,500 loads of which have been deposited on the floors to weather for future treatment. These shafts are still being deepened, and, when a depth of 300 feet is reached, a similar series of drives and tunnels will be made.

Machinery and Plant.

The gear (perfectly new, having been imported from well-known British makers), consists of:

- 1 50 horse-power Davy Paxman Washing Engine.
- 2 Multi-Tubular Boilers.
- 1 12 horse-power Winding Engine.
- 1 Set Double Rods.

Mechanical Haulage with endless Chain.

1 No. 6 "D" Gates Crusher, and other accessories forming a complete washing plant, also (for underground working) the usual head-gear, cages, etc., etc., and a 25 horse-power coupled geared Winding Engine with Drums.

The water supply (which is sufficient for all requirements) is obtained from the neighbouring farm Thorngrove, distant some six miles; here the Company have in use:

- 1 Treble Barrel Evans Ram Pump, and
- 1 Double Barrel Deep Well Pump, both of which are driven by one of Marshall's 16 horse-power Compound Engines and Boiler.

Labour.—Forty Europeans and 300 Natives are employed, the rate of wages, owing to the great demand for Native labour, has been increased by 50 per cent. above that ruling before the late war, and at present the labour supply is amply sufficient for all requirements.

The Windsor Mining Syndicate, Limited.

This Syndicate, with a holding of 42 Claims in the Smith Prospect Mine, commenced the erection of a hauling gear in May, 1903, but washing did not commence until the 26th June of same year. The present washing plant consists of one 10 feet pan with necessary cylinder and elevators, etc., but no crushers or rollers.

All work has hitherto been confined to the open, but, as with the present plant, it was found impossible to derive the full benefit from the ground hauled, an order has been placed in the hand of a well-known firm of Engineers for a direct treatment gear, which should be completed and shipped early in January, 1904. Washing ceased on the 4th November, since which time, preparations have been made for the erection of the new plant. The total number of loads hauled was 24,920, of which 15,865 loads of cylinder lumps have been reserved for future treatment; 9,055 loads of ground have been washed, returning 470 carats of diamonds, being an average yield per 100 loads of 5.1905.

Otto's Prospect Mine.

At the close of the year 1902 this Mine was taken over by the New Weltevreden Estate and Diamond Mining Company, Limited. During the first five months of 1903 the machinery was thoroughly overhauled, and important additions and alterations made, necessary buildings and dwelling-houses were erected, while at the same time a large quantity of overburden was stripped from the Mine, a new incline was also made into the Mine, entering at the south-west corner. On the 18th of May washing was resumed, and has since been carried on continuously, with—I am informed—satisfactory results. A test shaft timbered and lagged has also been put down in the centre of the Mine to a depth of 175 feet.

Labour.—Twelve Europeans are employed, and from 130 to 160 Natives, the supply of the latter being well up to requirements.

Jubilee Prospect Mine.

This Mine consists of 182 Claims as per Official Plan; here work was carried on for a short time in the early part of the year, when the Mine was closed down. I am not in a position to give the number of loads hauled, washed, or diamonds found.

Leased Mines.

The Leicester Mine.—The Elands Drift Diamonds Estates, Limited, which hold (with the exception of one morgen), the whole of this Mine, hauled during the year 1903, 192,000 loads of yellow ground, and 43,000 loads of reef, 27,000 loads of blue ground have also been hauled from the 130 and 150 feet levels, making a total in all of 262,000 loads.

The developments in the west end, mentioned in my previous Report, have been but slowly continued, owing to the large amount of water to be dealt with, and the general treacherous nature of the ground. About the middle of April the mechanical haulage was connected with this portion of the Mine, and hauling and washing operations were started and carried on until the 16th of June, when work on this side of the Mine ceased, and has not since been resumed, work, however, is still actively going on in the east portion of the Mine.

Early in September the Company stopped all other workings and commence a development shaft (12 feet by 6 feet inside timbers, and divided up into two cageways, and one ladderway), which was put down in about the centre of the open workings, at the east end of the Mine, with a view to test the quality of the ground at the 300 feet level, and from which base it was intended to make drives, north, south, east, and west; this shaft was completed towards the end of November, when the required drives were commenced and are still continued.

The number of boys employed prior to the closing down of the open workings averaged about 300 per week, while the number engaged in the development work during the latter part of the year averaged about 60 per week.

Owing to careful medical and other attention, the Natives in this Company's Compound have been exceptionally free from sickness, during the year only four deaths have occurred, and these from Pneumonia, contracted before entering the Company's service.

The Central Diamond Mining Company, Limited.

This Company, with a holding of one morgen in the Leicester Mine, commenced work on the 22nd April, 1903. The ground is hauled from the Mine on Aerial Gear by means of a 12 horse-power Davy Paxman Winding Engine, and then conveyed a distance (some 300 yards) by mechanical haulage worked by a 10 horse-power Hornsby Engine, which also drives the pumps supplying water to the washing machine; the washing plant consist of one 40 horse-power Tandem Compound Engine, 1 per corrugated, and one per smooth rollers, with two 12-feet pans; 56,881 loads of ground were washed and 46,800 loads of reef hauled, making a total haulage of 103,681 loads. On an average 10 Europeans, and 120 Natives have been employed.

Newlands Mines, Nos. 1 and 2.

Work has not been recommenced in these Mines.

At this stage, I should here like to acknowledge my indebtedness to the Managers of the several Companies for interesting data so kindly furnished me.

Borrell's Prospect Mine.

The lease of the whole of this Mine was adjudged to James Taggart, on the 6th March, 1903.

Russell Mine.

The lease of the whole of this Mine was adjudged to Ernest Evan Morgan Tozer, on the 28th March, 1903.

I have not been advised whether these leases have been completed.

Other Abandoned Mines Unleased.

Wrigley's Kopje Mine, Victoria Mine, and the Washington Mine are at present unleased.

Accidents—During the year nine accidents were reported from the various Mines and Diggings, by which nineteen persons suffered; of these five were killed, and one fatally injured, and thirteen others more or less injured.

The following table gives the necessary particulars:—

Nature of Accident.	No. of Separate Accidents.	No. of Persons Killed.		No. of Persons Injured.	
		White.	Coloured.	White.	Coloured.
<i>Underground:—</i>					
Fall from Roof	1	...	1	...	...
<i>Open Working:—</i>					
Fall of Ground	2	1	2	...	6
Miscellaneous	4	...	1	1	2
<i>Alluvial Workings:—</i>					
Descending Shaft	1	...	...	1	...
<i>Underground Workings:—</i>					
Fall of Roof	1	...	1	...	3

The first accident (whereby a Native lost his life), occurred on the 3rd March in the west incline in the Leicester Mine; here, while the contractor and his boys were engaged in trimming the sides and roof at the extreme end of the incline, a lump of ground suddenly came away from a corner of the roof, with the result mentioned; this seems to have been a pure accident, though one too common in mining, despite every precaution.

On the 18th July an accident occurred in a shaft in the Frank Smith Mine, whereby a Native was severely injured by a falling bucket, which had become detached from the wire by the breaking of a $\frac{5}{8}$ -inch bolt; at the time of the accident there were one white man and several Natives at work in the shaft, all of whom, with the exception of the man injured, managed to get out of the way. Here again a careful examination of the shackles and wire had been made by the Miner-in-charge before descending to work in the shaft.

Falls of Ground from Open Workings.

During the year there have been two accidents of this nature, and both in the holding of the Frank Smith Diamond and Exploration Company, Limited, in the Frank Smith Mine, whereby a white man and a Native were killed, and seven Natives injured, one fatally.

The first accident occurred on the morning of the 7th August, and was caused by the fall of a piece of ground from an open face working, which, breaking into lumps as it touched bottom, ricocheted in all directions, one lump striking a Native standing some 22 feet distant, severely injuring him; he was at once taken to the Company's Compound, where he received proper medical attendance. The immediate cause of this fall of ground (about one load), is attributable to the existence of a soapy seam, which had been hidden until the fall took place.

The second accident, by which one white man and a Native were instantaneously killed, while seven Natives were injured, occurred on the afternoon of the same day, but at an entirely different spot at the 75 feet level (open workings); here, from a face 30 feet high, some 600 loads of ground suddenly came away, with the result already mentioned. The face where the accident occurred had been carefully examined by the Claim Manager at 3 o'clock in the afternoon (the ground coming away at 5 o'clock). The white man and Native killed were at the time of the

fall right up against the face, engaged in charging a hole with dynamite; the other Natives injured (one of whom has since succumbed to his injuries), were some little distance off, engaged in loading up loose ground. In this accident it would appear that the ground gave no warning whatever, but simply bulged out from the centre, leaving the upper portion of the face overhanging.

Accidents from Miscellaneous Causes.

On June 15th, a European Claim Manager managed to get his foot under a loaded truck. This accident was not, however, attended with any serious consequences.

On 22nd September, a Native, passing one of the machine shafts at Otto's Prospect Mine, had his jacket caught, and, before he could be extricated, his arm had been drawn in and severely torn; he was at once taken to Klipdam for medical treatment, and has since returned to work.

On 25th November, at the Otto's Prospect Mine, an accident occurred through the breaking of a 9/16-inch short link chain, connecting the trucks to the hauling wire, whereby a Native lost his life. The trucks (2) on being freed, rushed down the incline into the open Mine, where at the time number of men were at work. All easily got out of harms way save one Native, who, losing his head, left an absolutely safe position, and rushed straight into the descending trucks, death being instantaneous.

Accidents in Alluvial Diggings.

Descending Shaft.—On the 31st July an accident took place at that portion of the Waldeck's Plant Diggings, known as Keiskanna South, through which a Digger, named Kemp, had his leg broken. Mr. Kemp in reporting the accident merely observes it was caused by his own carelessness in letting go the rope while descending the shaft.

Accident in Underground Working in Alluvial Diggings.

On September 10th, an accident of a serious nature occurred at Robinson's Kopje, in the underground workings in a claim of Mr. T. A. Kennedy, whereby a Native, named Frans, was killed, and three others injured. It would appear from the evidence of the Foreman, named Phillip, that prior to the accident, and on the same day, he had tested the roof of the chamber, and found that at a certain spot it was unsafe; he accordingly at once ordered the boys to cease work at that particular spot. Soon afterwards he had occasion to leave the claim for a short time, and on his return found that an accident had happened through the fall of several loads of ground from the roof, at the identical spot which he had previously tested and found unsafe, and that during his temporary enforced absence, the Natives had disobeyed his orders and recommenced work in the dangerous locality, with the abovementioned disastrous consequences.

In conclusion, I may mention that the year 1903 (owing to the unprecedented lowness of the Vaal River, which during the latter end of the year in many places absolutely ceased to run), will long be memorable in the minds of Diggers, who (seizing the opportunity offered), worked to advantage, many spots in the bed of the river which hitherto they had never had the chance of even approaching.

W. FRANKLIN,
Inspector of Claims.

Inspector of Claims Office,
Barkly West, 15th January, 1904.

ANNEXURE I.

ANNEXURE 1 TO REPORT II.

BARKLY WEST.

CLASS I.—Mines and Diggings on Crown Lands.

MINE OR DIGGING.	Claim Licences.		Deposit Sites.		When and under what Proclamation proclaimed.	When and under what Proclamation abandoned.	When leased and by whom.
	Government.	Whole	Government.	Whole			
Borrell's Prospect Mine (d)	Whole	Whole	Whole	Whole	Proc. 166 of 3.10.83	Proc. 259 of 28.11.84	2 morgen on 26.9.87 to Carl Droste. 2 " 26.9.87 to T. A. Higson. 1 " 28.3.88 to E. M. Lit- kie and E. W. Heekrath. 2 " 12.5.96 to E. J. Carlyon. 2 " 15.5.96 to J. G. Moohan. 1 " 10.8.96 to E. J. Carlyon.
Welsh's Prospect	"	"	No Deposit Sites	"	23 of 27.1.87	Still open	
Hebron (a) "	"	"	do	"	34 of 28.11.71	"	
Klipdrift (b)	"	"	do	"	39 of 10.1.72	"	
Forlorn Hope	"	"	do	"	34 of 28.11.71	"	
Longland's Rush (c)	"	"	do	"	35 of 8.12.71	"	
Esterhuizen's Rush...	"	"	do	"	34 of 28.11.71	"	
Winter's Rush	"	"	do	"	34 of 28.11.71	"	
Delpot's Hope	"	"	do	"	34 of 28.11.71	"	
Washington Mine	"	"	Whole	Whole	27 of 13.2.89	Proc. 226 of 17.8.91	1 morgen on 11.7.95 to Geo. Beet, remainder on 4.4.96 to Solomon James.
Russell Mine (e)	"	"	"	"	57 of 10.3.90	" 292 of 21.10.91	
Jonas Kopje (f)	"	"	No Deposit Sites	"	131 of 1885	Still open	

REMARKS.—

(a) Extended to all Alluvial Deposits on the Hebron Commonage by Proclamation 237 of 1887.

(b) Klipdrift as per Proclamation 39 of 10.1.72, extends on North Bank of Vaal River from Upper Klipdrift to Good Hope.

(c) Proclamation 35 of 8.12.71 proclaims areas from Forlorn Hope to Esterhuizen's Kop, 1 mile in a direct line to the North, and also proclaims area between Winter's Rush and Delpot's Hope, one mile in a North-Westerly direction of Vaal River, as a Public Digging.

(d) All leases cancelled with exception of 2 morgen leased to E. J. Carlyon on 12.5.96.

(e) Lease of 1 morgen to George Beet since cancelled.

(f) Jonas Kopje extended North and West by Proclamation 327 dated 11.11.98.

Size of all claims in all Alluvial Diggings, except Surveyed Gong Gong, Brady's Prospect and Ward Hope fixed at 60 by 30 feet by Proclamation No. 368 dated 4.12.03.

ANNEXURE 1 TO REPORT II.—continued.

CLASS II.—Mines and Diggings on Property with reservation of Minerals to Crown.

MINE OR DIGGING.	Claim Licences.		Deposit Sites.		When and under what Proclamation proclaimed.	When and under what Proclamation abandoned.	When leased and by whom.
	Government.	Proprietor.	Government.	Proprietor.			
Victoria Mine (a) ...	Whole	Nil	Nil	Whole	Proc. 172 of 13.10.81	Proc. 4 of 4.1.84	1 morgen on 26.9.87 to Martin Broderick, 2 morgen on 26.9.87 to Carl Droste, remainder on 5.3.88 to George Kilgour.
Newlands, No. 1 Mine (b)	"	"	"	"	" 191 of 17.11.81	" 19 of 24.1.84	3 morgen on 29.7.96 to Percy J. us.
Newlands, No. II Mine ...	"	"	"	"	" 58 of 6.4.82	" 37 of 25.2.89	1 morgen on 12.5.84 to George Paton, 2 morgen on 13.2.88 to James Murray.
Wrigley's Mine (c)	Half	Half	"	"	" 55 of 12.4.83	" 248 of 23.10.84	4 morgen on 26.5.96 to G. L. Trubenbach.
Good Hope ...	Whole	Nil	No deposit Sites		" 34 of 28.11.71	Still open	1 morgen on 14.3.89 to G. A. M. Tapscott, 4 morgen on 26.5.96 to G. L. Trubenbach.
Bad Hope ...	"	"	do		" 34 of 28.11.71	"	2 morgen on 28.7.87 to Martin Broderick, 1 morgen on 14.1.87 to Martin Broderick.
Gong Gong (d) ...	Half	Half	do		" 34 of 28.11.71	"	Whole mine to Wm. Haddock on 25.6.97.
Central Gong Gong (e)	"	"	do		" 297 of 3.12.90	"	

REMARKS—

- (a) All leases cancelled.
 (b) The 2 morgen leased to J. Murray since cancelled. Both Newlands I. and II. are now in possession of the Newlands West Griqualand D. Mines, Ltd.
 (c) The 3 morgen leased to Martin Broderick since cancelled. Mr. Haddock failed to comply with provisions of lease, which was therefore cancelled.
 (d) Old Gong Gong further extended by Proclamation 228 of 1887.
 (e) Central Gong Gong extended East and South by Proclamation 197 of 14.5.95 Claims 60 by 30 ft. Size of Claims in Central Gong Gong increased to 60 by 30 ft. by Proclamation 198 of 14.5.95.

CLASS II.—Mines and Diggings on Property with reservation of Minerals to Crown.—continued.

MINE OR DIGGING.	Claim Licences.		Deposit Sites.		When and under what Proclamation Proclaimed.	When and under what Proclamation abandoned.	When leased and by whom.
	Government	Proprietor.	Government	Proprietor.			
Union Kop (<i>f</i>) ...	Half	Half	No deposit Sites		Proc. 34 of 28.11.71	Still open	
Keiskama North (<i>g</i>) ...	"	"	do		34 of 28.11.71	"	
Jacob's Prospect (<i>h</i>) ...	"	"	do		54 of 1886	"	
Holpan No. I ...	"	"	do		84 of 5.5.88	"	
Holpan No. II (<i>i</i>) ...	"	"	do		182 of 13.8.90	"	
Holpan No. III ...	"	"	do		356 of 1.11.92	"	
Klipdam ...	"	"	do		194 of 1888	"	
Van Zoelen's Laagte (<i>j</i> & <i>o</i>) ...	"	"	do		193 of 1888	"	
Snyder's Rush (<i>k</i>) ...	"	"	do		303 of 2.11.91	"	
Scholtz Prospect (<i>l</i> & <i>p</i>) ...	"	"	do		206 of 5.7.92	"	
Ward Hope... ..	"	"	do		24 of 18.1.93	"	
Brady's Prospect ...	"	"	do		162 of 1892	"	
Leicester Mine ...	"	"	Nil	Whole	180 of 30.4.95	Proc. 224 of 30.8.99	* Lease of whole of Leicester Mine adjudged to the Newlands Drift Mining and Estate Company, Ltd., on 4.10.99.
Smith's Prospect ...	"	"	"	"	203 of 28.6.97	Still open	
Otto's Prospect Mine ...	"	"	"	"	202 of 28.6.97	"	
Jubilee Prospect Mine ...	Quarter.	Three-quarters.	20s. per claim covers rent of Depositing Site.	"	96 of 4.6.02	"	
Vervanhiër ...	Half	Half	No deposit site		84 of 6.3.03	"	

REMARKS.

- (*f*) Only that portion open on Union Kopje Farm. Certain portion of Union Kopje Farm beacons off as residential sites under authority of Letter M9/10856 of 19.1.98.
- (*g*) Further extended by Proclamation 59 of 1887.
- (*h*) Further extended under authority of Letter B/198 of 24.6.86.
- (*i*) Size of Claims Holpan II. and III. increased to 60 by 30 ft. and licence to 10s. per claim by Proclamation 66 of 29.2.96.
- (*j*) Van Zoelen's Laagte. Certain portions eliminated by Proclamation 323 of 7.8.95, 115 of 31.3.96, 204 of 15.6.96.
- (*k*) Size of claims increased to 60 by 30 ft. and licence to 10s. per claim by Proclamation 506 dated 24.12.95.
- (*l*) Size of claims increased to 60 by 30 ft. and licence to 10s. per claim by Proclamation 196 dated 4.6.96. Certain portions eliminated by Proclamations 203 dated 15.6.96, and 520 dated 13.12.97.
- (*m*) This Lease transferred to Elands Drift Diamond Estates, Limited.
- (*n*) Portion of Leicester Mine, in extent 597 sq. rods and 62 sq. feet, sub-let to Central Diamond Company (Leicester Mine), Limited.
- (*o*) Van Zoelen's Laagte alluvial area extended by Proclamation 371 dated 11.12.03.
- (*p*) Scholtz Prospect alluvial area extended by Proclamation 367 dated 4.12.03.

ANNEXURE 1 TO REPORT II—continued.

CLASS III.—Mines and Diggings on Property on which there is no reservation of Minerals to Crown.

MINE OR DIGGING.	Claim Licences.		Deposit Sites.		When and under what Proclamation proclaimed.	When and under what Proclamation abandoned.	When and by whom leased.
	Government.	Proprietor.	Government.	Proprietor.			
Pniel	Half	Half	No Deposit Sites		Proc. 33 of 28.11.71	Proc. 243 of 1887	On 27.1.88 to W. H. Stone.
Webster's Kopje	"	"	do		" 33 of 28.11.71	53 of 17.2.96	
Cawood's Hope	"	"	do		" 33 of 28.11.71	53 of 17.2.96	
Waldeck's Plant (including Keiskanna South) (a)	"	"	do		53 of 4.9.72	Still open	
Blue Jacket or Niekerk's Rush (b)	"	"	do		" 33 of 28.11.71	"	

REMARKS—(a) Keiskanna South, merely an extension of Waldeck's Plant, so called for convenience.
(b) Defined by Proclamation 93 of 29.6.82.

CLASS IV.—Alluvial Diggings in Kimberley Division proclaimed with consent of Proprietor.

MINE OR DIGGING.	Claim Licences		Deposit Sites.		When and under what Proclamation proclaimed.	When and under what Proclamation abandoned.	When and by whom leased.
	Government.	Proprietor.	Government.	Proprietor.			
Spence's Kopje	Half	Half	No Deposit Sites		Proc. 129 of 1886	Proc. 13 of 15.1.95	
Liversides	"	"	do		" 129 of 1886	" 13 of 15.1.95	
Wedberg or Robinson's Kopje No. 2 (a)	"	"	do		" 129 of 1886	Still open.	
Robinson's Kopje No. 1	"	"	do		" 89 of 1887	"	

REMARKS—(a) Wedberg further extended by Proclamation 51 of 1887.

ANNEXURE 1 TO REPORT II--continued.

CLASS V.—Alluvial Diggings in Herbert Division.

DIGGING.	Claim Licences.		Deposit Sites.		When and under what Proclamation proclaimed.	When and under what Proclamation abandoned.	When leased and by whom.
	Government.	Proprietor.	Government.	Proprietor.			
Atherton Diggings (a) ...	Half	Half	No Deposit Sites.		Proc. 81 of 14.2.95	Proc. 358 of 19.10.96	
Faber's Put Alluvial Diggings	"	"	do		" 306 of 31.7.95	" 359 of 19.10.96	

REMARKS :—(a) Area further extended by Proclamation No. 196, dated 14.5.95.

ANNEXURE II.

Name of Mine or Digging.	Diggers' Licences.	Miners' Certificates.	Total.
	£ s. d.	£ s. d.	£ s. d.
Wedburg, or Robinson's No. 2.....	59 0 0	14 15 0	73 15 0
Robinson's No.1.....	3,477 0 0	51 5 0	3,528 5 0
Waldeck's Plant.....	411 10 0	30 5 0	441 15 0
Keiskanna South.....	76 0 0	13 0 0	89 0 0
Niekerk's Rush.....	79 10 0	15 15 0	95 5 0
Brady's Prospect.....	11 0 0	4 0 0	15 0 0
Jonas Kopje.....	1 0 0	0 5 0	1 5 0
Ward Hope.....	...	...	...
Hebron.....	616 0 0	147 10 0	763 10 0
Klipdam.....	455 10 0	101 0 0	556 10 0
Holpan No. 1.....	69 10 0	} 34 5 0	182 5 0
Holpan No. 2.....	7 0 0		
Holpan No. 3.....	71 10 0		
Van Zoelen's Laagte.....	25 10 0	4 0 0	29 10 0
Jacob's Prospect.....	8 0 0	1 15 0	9 15 0
Scholtz Prospect.....	110 10 0	18 10 0	129 0 0
Snyder's Rush.....	435 0 0	95 15 0	530 15 0
Klipdrift.....	211 10 0	46 10 0	258 0 0
Good Hope.....	90 0 0	15 5 0	105 5 0
Bad Hope.....	25 0 0	3 15 0	28 15 0
Gong Gong.....	313 0 0	21 0 0	334 0 0
Union Kopje.....	35 10 0	6 5 0	41 15 0
Keiskanna North.....	40 10 0	5 15 0	46 5 0
Forlorn Hope.....	6 10 0	1 0 0	7 10 0
Longland's Rush.....	146 0 0	43 0 0	189 0 0
Esterhuizen's Rush.....	1 0 0	0 5 0	1 5 0
Winter's Rush.....	109 0 0	24 10 0	133 10 0
Delpont's Hope.....	248 10 0	67 0 0	315 10 0
Vervanhier.....	43 10 0	9 5 0	52 15 0
Leicester Mine.....	65 0 0	...	65 0 0
Smith's Prospect Mine.....	2,878 0 0	0 5 0	2,878 5 0
Otto's Prospect Mine.....	1,118 0 0	...	1,118 0 0
Jubilee Prospect Mine.....	1,642 0 0	...	1,642 0 0
Total.....	12,886 10 0	775 15 0	13,662 5 0
Transfer Certificates ...	...	...	267 15 0
Reservation Certificates ...	...	...	1 11 0
Total ...	...	...	£13,931 11 0

W. FRANKLIN,
Inspector of Claims.

Inspector of Claims' Office,
Barkly West,
15th January, 1904.

